

25th YEAR OF PUBLICATION

**BRIEF
PASSENGER CAR
DATA**

1958



ETHYL CORPORATION



BRIEF PASSENGER CAR DATA

1958

ETHYL CORPORATION

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TABLE OF CONTENTS

	Page
Foreword	5
Notice Page and General Notes.....	6
List of Abbreviations.....	7
Summary of Characteristics	8
Buick	9
Cadillac	10
Chevrolet	11
Chrysler	12
Continental	13
DeSoto	14
Dodge	15
Edsel	16
Ford	17
Imperial	18
Lincoln	19
Mercury	20
Oldsmobile	21
Packard	22
Plymouth	23
Pontiac	24
Rambler	25
Rambler-Metropolitan	26
Studebaker	27
Spark Plug Heat Range Comparisons.....	28
Spark Plug Heat Range Comparisons.....	29
Automatic Transmissions	30
Automatic Transmissions	31
Trends of American Passenger Car Engine Design.	32
Trend in Antiknock Quality, Regular Gasoline...	33
Trend in Antiknock Quality, Premium Gasoline..	34

FOREWORD

This is the twenty-fifth edition of the "Brief Passenger Car Data" booklet. First published in 1931, it has been brought out annually since that time with the exception of the war years of 1943-44-45. In the twenty-seven years that have elapsed, many remarkable things have transpired in the field of automotive progress.

For one, the automobile has developed from a commodity that was a relative luxury into a mode of transportation that today is a necessity in the lives of millions. The improvements in the engines and the fuels — through the joint efforts of the automotive and petroleum industries — in this short span of time have been immense. A single illustration of this advance is found in the rise of average compression ratios of engines along with a corresponding increase in the antiknock quality of gasoline. In 1931, the average compression ratio was 5.23; in 1958 it is about 9.47. In the same period, the average octane number of regular gasoline rose from 63 to 91 and that of premium grade from 75 to 98 with several grades of premiums available at 100 octane or higher.

During these 27 years, many different makes of cars have come and gone. For instance, 17 of the 30 makes of cars which were included in the first issue of this booklet have since been discontinued by their manufacturers. (The *Auburn*, *Cord*, *Duesenberg*, *Cunningham*, *Durant*, *Essex*, *Franklin*, *Graham*, *Hupmobile*, *Jordan*, *Marmon*, *Oakland*, *Peerless*, *Pierce*, *Reo*, *Stutz*, and *Willys-Overland*). Many readers can recall and visualize most of them, but to the younger generation of motorists, they are possibly no more than a name associated with some past automotive era.

Since 1931, manufacturers have introduced 13 new makes of cars. (The *Terraplane*, *Lafayette*, *Austin* (American), *LaSalle*, *Rockne*, *Continental* (offered in 1933 by Continental Motors Corporation), *Kaiser*, *Frazer*, *Henry J.*, *Continental* (by the Ford Motor Company), *Mercury*, *Edsel*, and *Rambler*). Of these cars, only the last four listed are still in production today.

This booklet, too, has undergone many changes since 1931. New sections have been added; its format has been revised several times, and as new improvements in automobiles and fuels arose, new information has been gathered and reported. The circulation of the booklet has increased enormously. In 1931, 500 copies of the first edition were printed. In 1958, more than 250,000 copies will be made available as a service publication to people in the automotive and petroleum industries.

NOTICE

The specifications and adjustments contained in this booklet have been compiled by the Research Laboratories of the Ethyl Corporation from information supplied by manufacturers of motor cars, ignition apparatus, spark plugs, etc. None of this information represents the results of tests at the Research Laboratories of the Ethyl Corporation.

This information covers the essential characteristics, in ready reference form, of the 1958 passenger car models. It is correct at date of publication, but changes may be made from time to time by motor car manufacturers.

Data on horsepower, torque, bmep, etc., are that given by the manufacturer. Methods and technique of testing differ in various engineering departments, so these data are frequently not comparable for different makes of cars.

GENERAL NOTES

Spark Plugs

The spark plug installed and recommended by the factory is shown first in the specifications with the corresponding AC, Auto-Lite or Champion spark plug shown as an alternate. These plugs are designed for average driving conditions. For heavy-duty or high-speed driving, it may be necessary to use a colder plug in order to obtain satisfactory spark plug life. The necessity for a colder plug is indicated by rapid electrode wear.

It is sometimes necessary to change to a plug which is hotter than the factory equipment plug for very light service, especially in metropolitan areas. If an engine is not pumping oil and the ignition system is in good condition but the spark plug consistently fouls—the need for a hotter plug is indicated. Caution should be exercised in using hotter than standard plugs as they are likely to cause preignition if the vehicle is subjected to high-speed driving.

Ignition Timing

Ignition timing is given in crankshaft degrees and is factory setting. All distributors are provided with an adjustment enabling the ignition timing to be reset without disturbing the calibration of the distributor advance mechanism. Retarded ignition timing will eliminate or reduce detonation but will result in decreased performance and fuel economy. Also, in most cases, an ignition setting slightly in advance of the factory setting will result in additional performance and economy, although such an ignition setting will require a fuel of higher antiknock value than the standard setting.

Carburetors

Carburetors should not be adjusted or jets changed except by qualified mechanics. Correct fuel (or float) levels are extremely important to satisfactory performance and fuel economy — factory specifications should be strictly maintained.

Transmissions and Axle Ratio

The transmissions which are available as standard or optional equipment are listed with the axle ratios which are used as standard equipment with each type of transmission. In some instances additional axle ratios are available as optional equipment. A description of the automatic transmissions is given on pages 30 and 31.

Shipping Weight

The shipping weight is given for the four-door sedan with standard equipment. The weight of optional equipment such as radios, heaters, and automatic transmissions, etc., is not included. If the automatic transmission is included as standard equipment on the car, its weight is included in the shipping weight.

LIST OF ABBREVIATIONS

AC	AC Spark Plug Division, GMC
Adv	Advance
AL	The Electric Auto-Lite Company
AMA	Automobile Manufacturers Association
ATC	After Top Center
BTC	Before Top Center
Bmep	Brake mean effective pressure
C	Cold (valve adjustment)
Car	Carter (carburetors)
Centrif	Centrifugal
Champ	Champion Spark Plug Company
Clr	Clearance
CNS	Chrome Nickel Steel
DD	Downdraft
Deg	Degrees
DR	Delco-Remy Division, GMC
Eng	Engine
Eqpt	Equipment
Exh	Exhaust
H	Hot (valve adjustment)
HP	Horsepower
Hyd Lifters	Hydraulic Lifters
I	In-head (overhead valves)
Int	Intake
L	L-head
Max	Maximum
No. Cyl	Number of Cylinders
OD	Overdrive
Recm Press	Recommended Pressure (tires)
RP	Rochester Products (carburetors)
SD	Side Draft
Sil	Silchrome
Sgl	Single
Std	Standard
Strom	Stromberg Carburetor Company
TDC	Top Dead Center
Trans	Transmission
Vac	Vacuum

SUMMARY OF CHARACTERISTICS
1958 UNITED STATES PASSENGER CARS
Specifications for Four-Door Sedans

	<u>1957</u>	<u>1958</u>	<u>Change</u>
Number of Makes.....	19	18	-1
Number of Models.....	47	50	+3
ENGINE CHARACTERISTICS:			
Average Standard Compression Ratio.....	8.96	9.47	+0.51
Highest Standard Compression Ratio.....	10.0	10.5	+0.5
Lowest Standard Compression Ratio.....	7.2	7.8	+0.6
Average Displacement, Cubic Inches.....	309.9	325.4	+15.5
Average Maximum Brake Horsepower.....	236.7	258.6	+21.9
Average RPM at Maximum Horsepower.....	4594	4534	-60.0
Average Horsepower Per Cubic Inch.....	0.751	0.779	+0.028
Average Brake Mean Effective Pressure, PSI..	155.1	159.2	+4.1
Maximum Horsepower Per Cubic Inch.....	0.952	0.952	....
Minimum Horsepower Per Cubic Inch.....	0.544	0.460	-0.084
Average Lb/HP—6 Passenger Sedan.....	16.8	15.8	-1.0

**Rated-Horsepower With
Standard Compression Ratio:**

	<u>Number of Models</u>	
Under 75	1	0
75-99	1	+1
100-149	5	-1
150-199	3	-3
200-249	5	-3
250-299	15	-2
300-349	17	+8
350-400	3	+3

See Curve on Page 32

BUICK

Super,
Roadmaster
& Limited
Series 50, 70
& 700

CAR MODEL	Special Series 40	Century Series 60	Super, Roadmaster & Limited Series 50, 70 & 700
ENGINE			
No. Cyl-Head Type.....	V-8-I	V-8-I	V-8-I
Bore and Stroke (in).....	4.125 x 3.4	4.125 x 3.4	4.125 x 3.4
Displacement (cu in).....	364	364	364
AMA Horsepower.....	54.45	54.45	54.45
Max Horsepower @ rpm.....	250 @ 4400 (1)	300 @ 4600	300 @ 4600
Max Torque, lb-ft @ rpm.....	380 @ 2400 (1)	400 @ 3200	400 @ 3200
Max bmep, lb/sq in.....	157.4	165.7	165.7
Compression Ratio.....	9.5 (1)	10.0	10.0
IGNITION			
Spark Plug—Factory Eqpt.....	AC 45	AC 45	AC 45
Alternate.....		Champ J-12Y, AL A 52	
Spark Plug Gap.....		.030" to .035"	
Firing Order.....		1-2-7-8-4-5-6-3	
Distributor—Make and Model...		Delco-Remy 1110870	
Breaker Gap.....		.0125" to .0175"	
Cam Angle.....	30°	30°	30°
Timing—Crankshaft Degrees...	5° BTC (2)	5° BTC (2)	5° BTC (2)
Adv Deg—Centrif—Vac.....	26-1/2—19-1/2	26-1/2—19-1/2	26-1/2—19-1/2
Adv Begins—Ends—Eng rpm....	625-3750	625-3750	625-3750
Battery—Volts, Terminal Ground	12, Negative	12, Negative	12, Negative
VALVES			
Size and Material.....Int		1.875", SAE 8645	
Exh		1.437", S11 10 or 2155N	
Tappet Clr—Seat Angle.....Int		Hydraulic Lifters, 45°	
Exh		Hydraulic Lifters, 45°	
CARBURETOR			
Make, Model.....	Car WGD or Strom WW	Car AFB or Roch 4GC	
Type and Size.....	2 Bbl, 1.438"	4 Bbl, Pri. 1.56", Sec. 1.69"	
TRANSMISSION AXLE RATIO			
Conventional.....	Std. 3.58	None	None
Overdrive.....	None	None	None
Automatic.....	Opt. 3.23	Std. 3.23	Std. 3.23
Make Automatic (see page 30)	Variable Pitch Dynaflo or Flight Pitch Dynaflo	Variable Pitch Dynaflo or Flight Pitch Dynaflo	Flight Pitch Dynaflo
CAPACITY			
Oil (Refill).....(qt) 5		5	5
Water (includes heater).....(qt) 19		19	19
Conventional Transmission.....(pt) 2.5			
Auto. Transmission (Refill).....(qt)		12 — Variable Pitch Dynaflo 12.5 — Flight Pitch Dynaflo	
Rear Axle.....(pt) 6		6	6
Gasoline.....(gal) 20		20	20
GENERAL DATA (Four-Door Sedan)			
Wheelbase.....(in) 122.0		122.0	127.5
Over-All Lgth Incl Bumpers.....(in) 211.8		211.8	219.1 (3)
Shipping Weight.....(lb) 4099		4221	4481 (4)
Tire Size—Recm Press.....(lb) 7.10x15-24-24		7.60x15-24-24	(5)

- (1) Hp, torque, bmep and compression ratio for engines equipped with Dynaflo. For conventional transmission the compression ratio is 8.0 and power figures are not available.
- (2) Late production cars have 12°BTC basic timing with DR1110934 distributor.
- (3) Over-all length of Limited — 227.1
- (4) Weight given for Super; Roadmaster 4644; Limited 4678.
- (5) Super 7.60x15-24-24; Roadmaster and Limited 8.00x15-24-24.

CADILLAC

CAR MODEL	62	60 Special	75
ENGINE			
No. Cyl-Head Type.....	V-8-I	V-8-I	V-8-I
Bore and Stroke (in).....	4.0 x 3.625	4.0 x 3.625	4.0 x 3.625
Displacement (cu in).....	365	365	365
AMA Horsepower	51.2	51.2	51.2
Max Horsepower @ rpm.....	310 @ 4800 (1)	310 @ 4800 (1)	310 @ 4800
Max Torque, lb-ft @ rpm.....	405 @ 3100 (1)	405 @ 3100 (1)	405 @ 3100
Max bmep, lb/sq in.....	167.3	167.3	167.3
Compression Ratio	10.25	10.25	10.25
IGNITION			
Spark Plug—Factory Eqpt.....	AC 44	AC 44	AC 44
Alternate		Champ J-12Y, AL A 42	
Spark Plug Gap.....	.035"	.035"	.035"
Firing Order		1-8-4-3-6-5-7-2	
Distributor—Make and Model...		Delco-Remy 1110909	
Breaker Gap .....	.016"	.016"	.016"
Cam Angle	28° to 32°	28° to 32°	28° to 32°
Timing—Crankshaft Degrees ...	5° BTC (2)	5° BTC (2)	5° BTC
Adv Deg—Centrif—Vac	16-24	16-24	16-24
Adv Begins—Ends—Eng rpm....	700-4000	700-4000	700-4000
Battery—Volts, Terminal Ground	12, Negative	12, Negative	12, Negative
VALVES			
Size and Material	Int 1.875", 1041 Aluminized Steel		
	Exh 1.500", Sil X-10 or 2112N		
Tappet Ctr—Seat Angle	Int Hydraulic Lifters, 45°		
	Exh Hydraulic Lifters, 45°		
CARBURETOR			
Make, Model		Rochester 4GC or Carter AFB (1)	
Type and Size.....		4 Bbl, 1-7/16" Pri.; 1-11/16" Sec.	
TRANSMISSION AXLE RATIO			
Conventional	Axle Ratio None	None	None
Overdrive	Axle Ratio None	None	None
Automatic	Axle Ratio Std. 3.07 (3)	Std. 3.07 (3)	Std. 3.36 (4)
Make Automatic	(see page 30) Hydra-Matic	Hydra-Matic	Hydra-Matic
CAPACITY			
Oil (Refill)	(qt) 5	5	5
Water (Includes heater).....	(qt) 20.7	20.7	21.8
Conventional Transmission ..	(pt)		
Auto. Transmission (Refill) ..	(qt) 11	11	11
Rear Axle	(pt) 5	5	5
Gasoline	(gal) 20	20	20
GENERAL DATA (Four-Door Sedan)			
Wheelbase	(in) 129.5	133.0	149.75
Over-All Lgth Incl Bumpers. (in)	216.8 (5)	225.3	237.1
Shipping Weight	(lb) 4675	4930	5360
Tire Size—Recm Press.....	(lb) 8.00x15-26-26 (6)		8.20x15-28-28

(1) Q engine using three 2-barrel carburetors standard on Eldorados and optional on all other series. 335 bhp @ 4800, 405 lb-ft @ 3400.

(2) Ignition timing 10° BTC on Q engine.

(3) 3.36 ratio optional on 60 and 62 Series and standard on air conditioned cars and on cars equipped with the Q engine.

(4) 3.77 ratio optional on all model 75 cars.

(5) Model 6239E and Sedan DeVille 225.3; Eldorado 223.4; convertible and coupes 221.8.

(6) All white sidewall tires are 8.20x15-24-24.

CHEVROLET

CAR MODEL	Six	Turbo-Fire 263 V-8	Turbo-Thrust 348 V-8
ENGINE			
No. Cyl-Head Type.....	6-I	V-8-I	V-8-I
Bore and Stroke (in).....	3.56 x 3.94	3.875 x 3.00	4.125 x 3.25
Displacement (cu in).....	235.5	283	348
AMA Horsepower.....	30.4	48.0	64.5
Max Horsepower @ rpm.....	145 @ 4200	185 @ 4600 (1)	250 @ 4400 (2)
Max Torque, lb-ft @ rpm.....	215 @ 2100	275 @ 2400 (1)	355 @ 2800 (2)
Max bmep, lb/sq in.....	137.7	146.5	153.8
Compression Ratio.....	8.25	8.5 (1)	9.5
IGNITION			
Spark Plug—Factory Eqpt.....	AC 44	AC 44	AC 44
Alternate.....		Champ J-12Y, AL A 42	
Spark Plug Gap.....	.035"	.035"	.035"
Firing Order.....	1-5-3-6-2-4	1-8-4-3-6-5-7-2	
Distributor—Make and Model...	DR 1112103	DR 1110920 (3)	DR 1110927
Breaker Gap.....	.016" to .021"	.016" to .021"	.016" to .021"
Cam Angle.....	30°	30°	30°
Timing—Crankshaft Degrees....	TDC	4° BTC	4° BTC
Adv Deg—Centrif—Vac.....	26-15	28-15	24-15
Adv Begins—Ends—Eng rpm.....	600-3500	600-3750	750-4000
Battery—Volts, Terminal Ground	12, Negative	12, Negative	12, Negative
VALVES			
Size and Material.....	Int 1.875", 8645 Exh 1.50", 21-4N	1.72", 8645 1.50", 21-4N	1.94", 8645 1.66", 21-4N
Tappet Clr—Seat Angle.....	Int Hyd. Lifters, 30° Exh Hyd. Lifters, 45°	Hydraulic Lifters, 45°	Hydraulic Lifters, 45°
CARBURETOR			
Make, Model.....	RP BC	RP 2GC	Carter
Type and Size.....	Sgl, 1.573"	2 Bbl, 1.4375" (3)	4 Bbl, 1.4375"
TRANSMISSION AXLE RATIO			
Conventional.....	Axle Ratio Std. 3.55	Std. 3.55	Std. 3.55
Overdrive.....	Axle Ratio Opt. 4.11	Opt. 4.11	None
Automatic.....	Axle Ratio Opt. 3.36	Opt. 3.36	Opt. 3.36
Make Automatic (see page 30)	Powerglide	Powerglide or Turboglide	
CAPACITY			
Oil (Refill).....(qt)	5	4	4
Water (includes heater).....(qt)	17	17	23
Conventional Transmission.....(pt)	2 (4)	2 (4)	2
Auto. Transmission (Refill).....(qt)	4-1/2	Powerglide 4-1/2, Turboglide 2	
Rear Axle.....(pt)	4	4	4
Gasoline.....(gal)	20	20	20

GENERAL DATA (Four-Door Sedan)			
Wheelbase.....(in)	117.5	117.5	117.5
Over-All Lgth Incl Bumpers.....(in)	209.1	209.1	209.1
Shipping Weight.....(lb)	3447 (5)	3450 (5)	3551 (5)
Tire Size Recm Press.....(lb)	7.50x14-24-24	7.50x14-24-24	7.50x14-24-24

- (1) With optional 4-barrel carburetor and 9.5 compression ratio, bhp 230 @ 4800, 300 lb-ft @ 3000; with fuel injection, 250 bhp @ 5000, 365 lb-ft @ 3000.
- (2) With optional three 2-barrel carburetors, 280 bhp @ 4600, 355 lb-ft @ 3200.
- (3) Delco-Remy 1110390 distributor and 4-barrel carburetor used with 9.5 compression ratio engine.
- (4) One pint additional with overdrive.
- (5) Weight given for Biscayne model with manual transmission.

CHRYSLER

CAR MODEL	Windsor	Saratoga	New Yorker
ENGINE			
No. Cyl-Head Type.....	V-8-I	V-8-I	V-8-I
Bore and Stroke (in).....	3.94 x 3.63	3.94 x 3.63	4.0 x 3.9
Displacement (cu in).....	354	354	392
AMA Horsepower	49.7	49.7	51.2
Max Horsepower @ rpm.....	290 @ 4400	310 @ 4600	345 @ 4600 (1)
Max Torque, lb-ft @ rpm.....	385 @ 2000	405 @ 3200	450 @ 2800
Max bmep, lb/sq in.....	164.0	172.5	173.1
Compression Ratio	10.0	10.0	10.0
IGNITION			
Spark Plug—Factory Eqpt.....	AL AR-42	AL AR-42	AL AGR-42
Alternate	Champ XJ 12Y, AC R44S		Champ XN12Y, AC R44XLS
Spark Plug Gap.....	.035"	.035"	.035"
Firing Order	1-8-4-3-6-5-7-2		
Distributor—Make and Model...	AL IBP-4002F	AL IBP-4002F	AL IBS-4007A
Breaker Gap .....	.015" to .018"	.015" to .018"	.015" to .018"
Cam Angle	27° to 32°	27° to 32°	36° to 40° (2)
Timing—Crankshaft Degrees ...	8° BTC	6° BTC	6° BTC
Adv Deg—Centrif—Vac	20-22	20-22	20-22
Adv Begins—Ends—Eng rpm....	700-4200	700-4200	715-4800
Battery—Volts, Terminal Ground	12, Negative	12, Negative	12, Negative
VALVES			
Size and Material	Int 1.94", S11 F	1.94", S11 F	2.00", S11 F
	Exh 1.50", 21-4N	1.50", 21-4N	1.75", 21-4N
Tappet Clr—Seat Angle	Int	Hydraulic Lifters, 45°	45°
	Exh		Hydraulic Lifters, 45°
CARBURETOR			
Make, Model	Car BBD	Car AFB	Car AFB
Type and Size.....	2 Bbl, 1.44"	4 Bbl, 1.44"	4 Bbl, 1.44"
TRANSMISSION AXLE RATIO			
Conventional	Axle Ratio Std. 3.73	None	None
Overdrive	Axle Ratio None	None	None
Automatic	Axle Ratio Opt. 2.93	Std. 2.93	Std. 2.93
Make Automatic	(see page 30) TorqueFlite	TorqueFlite	TorqueFlite
CAPACITY			
Oil (Refill)	(qt) 4	4	5
Water (includes heater).....	(qt) 22	22	25
Conventional Transmission (pt) ..	2.75		
Auto. Transmission (Refill).....	(qt) 10.5	10.5	10.5
Rear Axle	(pt) 3.5	3.5	3.5
Gasoline	(gal) 23	23	23
GENERAL DATA (Four-Door Sedan)			
Wheelbase	(in) 122.0	126.0	126.0
Over-All Lgth Incl Bumpers. (in) ..	218.1	220.3	220.2
Shipping Weight	(lb) 3895	4120	4195
Tire Size—Recm Press.....	(lb) 8.00x14-22-22	8.50x14-22-22	9.00x14-22-22
(1) C-300D model uses special engine. 390 bhp @ 5200 rpm with fuel injection or 380 bhp @ 5200 rpm with two 4-barrel carburetors.			
(2) Dual breaker distributor 27° to 32° each breaker.			

- (1) C-300D model uses special engine. 390 bhp @ 5200 rpm with fuel injection or 380 bhp @ 5200 rpm with two 4-barrel carburetors.
 (2) Dual breaker distributor 27° to 32° each breaker.

CONTINENTAL

CAR MODEL

Mark III

ENGINE

No. Cyl-Head Type.....	V-8-I
Bore and Stroke (in).....	4.30 x 3.70
Displacement (cu in).....	430
AMA Horsepower	59.17
Max Horsepower @ rpm.....	375 @ 4800
Max Torque, lb-ft @ rpm.....	490 @ 3100
Max bmep, lb/sq in.....	171.8
Compression Ratio	10.5

IGNITION

Spark Plug—Factory Eqpt.....	Champ F 11-Y
Alternate	AC 84TS, AL BF42
Spark Plug Gap.....	.032" to .036"
Firing Order	1-5-4-2-6-3-7-8
Distributor—Make and Model...	Ford FEW 12127-E
Breaker Gap .....	.015"
Cam Angle	26° to 28.5°
Tuning—Crankshaft Degrees ...	7°BTC
Adv Deg—Centrif—Vac	26-1/2-23
Adv Begins—Ends—Eng rpm....	700-4000
Battery—Volts, Terminal Ground	12, Negative

VALVES

Size and Material	Int 2.145", Sll 1, Aluminum Coated
	Exh 1.775", Ford Cast Austenitic, Aluminum Coated
Tappet Clr—Seat Angle	Int Hydraulic Lifters, 30°
	Exh Hydraulic Lifters, 45°

CARBURETOR

Make, Model	Holley 4150
Type and Size.....	4 Bbl, 1.56"

TRANSMISSION

AXLE RATIO

Conventional	Axle Ratio	None
Overdrive	Axle Ratio	None
Automatic	Axle Ratio	Std. 2.89 (1)
Make Automatic	(see page 30)	Turbo-Drive

CAPACITY

Oil (Refill)	(qt) 5
Water (includes heater).....	(qt) 26
Conventional Transmission ..	(pt)
Auto. Transmission (Refill) ..	(qt) 10-1/2
Rear Axle	(pt) 4
Gasoline	(gal) 22

GENERAL DATA (Four-Door Sedan)

Wheelbase	(in) 131
Over-All Lgth Incl Bumpers. (in)	229.0
Shipping Weight	(lb) 4888
Tire Size—Reem Press.....	(lb) 9.50 x 14-24-24

(1) 3.07 axle optional on all models and standard on air conditioned cars

DE SOTO

CAR MODEL	Firesweep LS1-L	Firedome LS2-M	Fireflite LS3-H
ENGINE			
No. Cyl-Head Type.....	V-8-I	V-8-I	V-8-I
Bore and Stroke (in).....	4.06 x 3.38	4.12 x 3.38	4.12 x 3.38
Displacement (cu in).....	361	361	361
AMA Horsepower.....	52.7	54.3	54.3
Max Horsepower @ rpm.....	280 @ 4600 (1)	295 @ 4600	305 @ 4600 (2)
Max Torque, lb-ft @ rpm.....	330 @ 2400 (1)	390 @ 2400	400 @ 2800 (2)
Max bmcp, lb sq in.....	163.7	162.9	167.1
Compression Ratio.....	10.0	10.0	10.0 (2)
IGNITION			
Spark Plug—Factory Eqpt.....	AL AR-42	AL AR-42	AL AR-42
Alternate.....		Champ XJ-12Y, AC R44S	
Spark Plug Gap.....	.035"	.035"	.035"
Firing Order.....		1-8-4-3-6-5-7-2	
Distributor Make and Model...		Auto-Lite IBP-4005	
Breaker Gap.....	.015" to .018"	.015" to .018"	.015" to .018"
Cam Angle.....	27° to 32°	27° to 32°	27° to 32°
Timing—Crankshaft Degrees...	6° BTC	6° BTC	6° BTC
Adv Deg—Centrif—Vac.....	20-19	20-19	20-19
Adv Begins—Ends—Eng rpm....	700-4000	700-4000	700-4000
Battery—Volts, Terminal Ground	12, Negative	12, Negative	12, Negative
VALVES			
Size and Material.....Int		1.95", S11 P	
Exh		1.60", 21-4N	
Tappet Clr—Seat Angle.....Int		Hydraulic Lifters, 45°	
Exh		Hydraulic Lifters, 45°	
CARBURETOR			
Make, Model.....	Carter BBD (1)	Carter BBD	Carter AFB
Type and Size.....	2 Bbl, 1.56"	2 Bbl, 1.56"	4 Bbl, 1.44"
TRANSMISSION AXLE RATIO			
Conventional.....	Std. 3.54	Std. 3.54	None
Overdrive.....	None	None	None
Automatic.....	Opt. (3)	Opt. 3.15	Std. 3.15
Make Automatic (see page 30)	(3)	TorqueFlite	TorqueFlite
CAPACITY			
Oil (Refill).....(qt) 4		4	4
Water (includes heater).....(qt) 17		17	17
Conventional Transmission.....(pt) 2-3/4		2-3/4	
Auto. Transmission (Refill).....(qt) (4)		10-1/2	10-1/2
Rear Axle.....(pt) 3-1/2		3-1/2	3-1/2
Gasoline.....(gal) 20		23	23
GENERAL DATA (Four-Door Sedan)			
Wheelbase.....(in) 122		126	126
Over-All Lgth Incl Bumpers.....(in) 216.5		218.6	218.6
Shipping Weight.....(lb) 3660		3965	3990
Tire Size—Recm Press.....(lb) 8.00x14-22-22(5)		8.50x14-22-22 (6)	

- (1) 295 bhp @ 4600, 385 lb-ft @ 2800 with optional Carter AFB 4-barrel carburetor.
- (2) Adventurer has 10.25 compression ratio, 345 bhp @ 5000, 400 lb-ft @ 3600 with two 4-barrel carburetors; 355 bhp @ 5000, 400 lb-ft @ 3600 with fuel injection.
- (3) PowerFlite transmission with 3.31 axle ratio or TorqueFlite transmission with 3.15 axle ratio optional.
- (4) TorqueFlite transmission requires 10-1/2 quarts; PowerFlite, 10 quarts.
- (5) 8.50 x 14 tires optional.
- (6) 9.00 x 14 tires optional.

CAR MODEL	Coronet 6	Coronet & Royal V-8	Custom Royal V-8
ENGINE			
No. Cyl-Head Type.....	6-L	V-8-I	V-8-I
Bore and Stroke (in).....	3.25 x 4.63	3.69 x 3.80	4.06 x 3.38 (1)
Displacement (cu in).....	230	325	359
AMA Horsepower.....	25.4	43.3	52.7
Max Horsepower @ rpm.....	138 @ 4000	252 @ 4400(1&2)	295 @ 4600 (1)
Max Torque, lb-ft @ rpm.....	208 @ 1600	345 @ 2400(1&2)	385 @ 2800 (1)
Max bmep, lb/sq in.....	136.4	160.1	165.9
Compression Ratio.....	8.0	9.0	10.0
IGNITION			
Spark Plug—Factory Eqpt.....	AL AR-51	AL AGR-42	AL AR-42
Alternate.....	J-8, R45	XN-12Y, R41KLS	XJ-12Y, R44S
Spark Plug Gap.....	.035"	.035"	.035"
Firing Order.....	1-5-3-0-2-4	1-8-4-3-6-5-7-2	1-8-4-3-6-5-7-2
Distributor—Make and Model...	AL IBR-4001	AL IBP-4002E	AL IBP-4005
Breaker Gap.....	.018" to .022"	.015" to .018"	.015" to .018"
Cam Angle.....	39° + 3°	27° to 32°	27° to 32°
Timing—Crankshaft Degrees....	2°BTC	6°BTC	6°BTC
Adv Deg—Centrif—Vac.....	17-19	18-22	20-19
Adv Begins—Ends—Eng rpm....	700-3600	700-3300	700-4000
Battery—Volts, Terminal Ground	12, Negative	12, Negative	12, Negative
VALVES			
Size and Material.....	Int 1.53", St F	1.69", St F	1.95", St F
	Exh 1.41", XCR	1.56", 21-4N	1.60", 21-4N
Tappet Cir—Seat Angle.....	Int .010" H, 45°	Hydraulic Lifters, 45°	Hydraulic Lifters, 45°
	Exh .010" H, 45°	Hydraulic Lifters, 45°	Hydraulic Lifters, 45°
CARBURETOR			
Make, Model.....	Strom WW	Strom WW (3)	Car AFB
Type and Size.....	2 Bbl, 1.31"	2 Bbl, 1.44"	4 Bbl, 1.44"
TRANSMISSION AXLE RATIO			
Conventional.....	Std. 3.91	Std. 3.54	Std. 3.31
Overdrive.....	None	None	None
Automatic.....	Opt. 3.73	Opt. (4)	Opt. 3.15
Make Automatic (see page 30)	PowerFlite	(4)	TorqueFlite
CAPACITY			
Oil (Refill).....(qt)	5	5	4
Water (Includes heater).....(qt)	14	21	17
Conventional Transmission.....(pt)	2-3/4	2-3/4	2-3/4
Auto. Transmission (Refill).....(qt)	10	(5)	10-1/2
Rear Axle.....(pt)	3-1/4	3-1/2	3-1/2
Gasoline.....(gal)	20	20	20
GENERAL DATA (Four-Door Sedan)			
Wheelbase.....(in)	122	122	122
Over-All Leth Incl Bumpers.....(in)	213.8	213.8	213.8
Shipping Weight.....(lb)	3410	3555	3640
Tire Size—Recm Pres.....(psi)	7.50x14-21-22	7.50x14-24-22(6)	8.00x14-22-22

(1) D300 engine, 361 cu in. displacement, 305 bhp @ 4000, 400 lb-ft @ 2800 with 4-barrel carburetor; 320 bhp @ 4000, 400 lb-ft @ 2800 with two 4-barrel carburetors; or 333 bhp @ 4800, 400 lb-ft @ 3000 with fuel injection available on all V-8 models.

(2) Power figures given are for Coronet; 265 bhp @ 4400, 355 lb-ft @ 2800 for Royal.

(3) Royal has 4-barrel Carter WCFB carburetor.

(4) PowerFlite or TorqueFlite optional. 3.31 ratio with PowerFlite, 3.15 with TorqueFlite.

(5) PowerFlite requires 10 quarts, TorqueFlite, 9 quarts.

(6) Size given for Coronet 8.00 x 14 standard on Royal

EDSEL

CAR MODEL	Ranger and Pacer	Corsair and Citation
ENGINE		
No. Cyl-Head Type.....	V-8-I	V-8-I
Bore and Stroke (in).....	4.05 x 3.50	4.20 x 3.70
Displacement (cu in).....	361	410
AMA Horsepower.....	52.49	56.45
Max Horsepower @ rpm.....	303 @ 4600	345 @ 4600
Max Torque, lb-ft @ rpm.....	400 @ 2800	475 @ 2900
Max bmep, lb/sq in.....	167.1	174.7
Compression Ratio.....	10.5	10.5
IGNITION		
Spark Plug—Factory Eqpt.....	Champ F-11-Y	Champ F-11-Y
Alternate.....	AC 84TS	AL BF 42
Spark Plug Gap.....	.032" to .036"	.032" to .036"
Firing Order.....	1-5-4-2-6-3-7-8	1-5-4-2-6-3-7-8
Distributor—Make and Model...	Ford FEU 12127-D	Ford FEU 12127-E
Breaker Gap.....	.014" to .016"	.014" to .016"
Cam Angle.....	26° to 28.5°	26° to 28.5°
Timing Crankshaft Degrees....	(1)	7 BTC
Adv Deg—Centrif—Vac.....	16-1/2—12	26-1 2—23
Adv Begin—Ends—Eng rpm....	730-4000	700-4000
Battery—Volts, Terminal Ground	12, Negative	12, Negative
VALVES		
Size and Material..... Int	2.025", Sil 1 (2)	2.085", Sil 1 (2)
Exh	1.555", Ford Cast Austenitic (2)	1.775", Ford Cast Austenitic (2)
Tappet Clr—Seat Angle..... Int	Hydraulic Lifters, 30°	Hydraulic Lifters, 45°
Exh	Hydraulic Lifters, 45°	
CARBURETOR		
Make, Model.....	Ford or Holley	Holley
Type and Size.....	4 Bbl, 1.50"	4 Bbl, 1.50"
TRANSMISSION		
AXLE RATIO		
Conventional.....	Std. 3.56	None
Overdrive.....	Opt. 3.70	None
Automatic.....	Opt. 2.91	Std. 2.91
Make Automatic (see page 30)	Edsel	Edsel
CAPACITY		
Oil (Refill).....(qt)	5	5
Water (includes heater).....(qt)	19-1/2	23
Conventional Transmission.....(pt)	3-1 4 (3)	
Auto. Transmission (Refill).....(qt)	11-7/8	12-1/2
Rear Axle.....(pt)	5	5
Gasoline.....(gal)	20	20
GENERAL DATA (Four-Door Sedan)		
Wheelbase.....(in)	118	124
Over-All Lgth Incl Bumpers.....(in)	213.2	218.9
Shipping Weight.....(lb)	3826	4230
Tire Size—Recm Press.....(lb)	8.00x14-24-22	8.50x14-24-22
(1) 3-BTC with standard or overdrive transmission, 7 BTC with automatic transmission.		
(2) Intake and exhaust valves aluminum coated.		
(3) 4-1/2 pints with overdrive transmission.		

CAR MODEL	All Models Six	Custom 300 Fairlane V-8	Fairlane 500
ENGINE			
No. Cyl-Head Type.....	6-I	V-8-I	V-8-I
Bore and Stroke (in).....	3.62 x 3.60	3.75 x 3.30	4.00 x 3.30
Displacement (cu in).....	223	293	332
AMA Horsepower.....	31.54	45.0	51.2
Max Horsepower @ rpm.....	145 @ 4200	205 @ 4500 (1)	265 @ 4600 (2)
Max Torque, lb-ft @ rpm.....	212 @ 2100	295 @ 2400 (1)	360 @ 2800 (2)
Max bmep, lb/sq in.....	143.4	152.3	163.5
Compression Ratio.....	8.6	9.1 (1)	9.5 (2)
IGNITION			
Spark Plug—Factory Eqpt.....	Champ 870	Champ F 11-Y	Champ F 11-Y
Alternate.....	85TS, BF82	85TS, BF82	84TS, BF42
Spark Plug Gap.....	.032" to .036"	.032" to .036"	.032" to .036"
Firing Order.....	1-5-3-6-2-4	1-5-4-8-6-3-7-2	
Distributor—Make and Model.....	FET 12127-B	FEU 12127-M	FEU 12127-J
Breaker Gap.....	.024" to .026"	.014" to .016"	.014" to .016"
Cam Angle.....	35° to 38°	26° to 28.5°	26° to 28.5°
Timing—Crankshaft Degrees.....	(3)	(3)	(3)
Adv Deg—Centrif—Vac.....	None—24-1, 2	32-22	29-22
Adv Begins—Ends—Eng rpm....	1000-2700	770-4000	850-4000
Battery—Volts, Terminal Ground	12, Negative	12, Negative	12, Negative
VALVES			
Size and Material.....	Int 1.78", Sil 1 Exh 1.51", Ford Cast Austenitic	1.925", Sil 1 .019" H, 45°	2.03", Sil 1 (4) 1.56", (5) .026" H, 30°
Tappet Ctr—Seat Angle.....	Int .019" H, 45° Exh .019" H, 45°	.019" H, 45° .019" H, 45°	.026" H, 30° .026" H, 45°
CARBURETOR			
Make, Model.....	Holley	Ford or Holley	Holley
Type and Size.....	Sgl, 1.56"	2 Bbl, 1.44"	4 Bbl, 1.50" or 1.56"
TRANSMISSION			
Conventional.....	Axle Ratio Std. 3.70	Std. 3.56	Std. 3.56
Overdrive.....	Axle Ratio Opt. 3.70	Opt. 3.70	Opt. 3.56
Automatic.....	Axle Ratio Opt. 3.56	Opt. 3.10	Opt. (6)
Make Automatic.....	(see page 30) Fordomatic	Fordomatic	Fordomatic or Cruise-O-Matic
CAPACITY			
Oil (Refill).....(qt)	4	5	5
Water (includes heater).....(qt)	16	20	20
Conventional Transmission.....(pt)	3 (7)	3 (7)	3 (7)
Auto. Transmission (Refill).....(qt)	9	9	10
Rear Axle.....(pt)	5.5	5.5	5.5
Gasoline.....(gal)	20	20	20
GENERAL DATA (Four-Door Sedan)			
Wheelbase.....(in)	116 Custom (8)	116 Custom (8)	118
Over-All Lgth Incl Bumpers.....(in)	202 Custom (8)	202 Custom (8)	207
Shipping Weight.....(lb)	3214 Custom	3326 Custom	3510
Tire Size—Reem Press.....(lb)	7.50x14-24-22	7.50x14-24-22	7.50x14-24-22

- (1) The 265 bhp engine listed under Fairlane 500 is optional on Custom 300 and Fairlane models.
- (2) A 352 cu. in., 10.2 compression ratio, 300 bhp @ 4600, 395 lb-ft @ 2800 engine is available as optional equipment.
- (3) 4" BTC on 6 and 3" BTC on 292 and 352 cu in. V-8's with std. or OD transmission; 6" BTC with automatic. 5" BTC on 332 cu. in. V-8 with std. and OD transmission; 8" BTC with automatic.
- (4) Intake valves aluminum coated Sil 1 steel.
- (5) Exhaust valves aluminum coated Ford cast austenitic steel.
- (6) 2.91 axle ratio with Fordomatic; 2.69 with Cruise-O-Matic.
- (7) Capacity with overdrive, 3 pints refill.
- (8) 118" wheelbase, 207" over-all for Fairlane and Fairlane 500.

IMPERIAL

CAR MODEL		Imperial, Imperial Crown, and Imperial LeBaron
ENGINE		
No. Cyl-Head Type.....	V-8-I	
Bore and Stroke (in).....	4.00 x 3.90	
Displacement (cu in).....	392	
AMA Horsepower	51.2	
Max Horsepower @ rpm.....	345 @ 4600	
Max Torque, lb-ft @ rpm.....	450 @ 2800	
Max bmep, lb/sq in.....	173.1	
Compression Ratio	10.0	
IGNITION		
Spark Plug—Factory Eqpt.....	AL AGR-42	
Alternate	Champ XN 12Y, AC R44XLS	
Spark Plug Gap.....	.035"	
Firing Order	1-8-4-3-6-5-7-2	
Distributor—Make and Model...	Auto-Lite IRS-1007A	
Breaker Gap .....	.015" to .018"	
Cam Angle	36° to 40° (1)	
Timing—Crankshaft Degrees...	6°BTC	
Adv Deg—Centrif—Vac	20—22	
Adv Begins—Ends—Eng rpm....	715—4800	
Battery—Volts, Terminal Ground	12, Negative	
VALVES		
Size and Material.....Int	2.00", S11 F	
Exh	1.75", 21-4N	
Tappet Clr—Seat Angle.....Int	Hydraulic Lifters, 45°	
Exh	Hydraulic Lifters, 45°	
CARBURETOR		
Make, Model	Car AFB	
Type and Size.....	4 Bbl, 1.44"	
TRANSMISSION		
Conventional	Axle Ratio	None
Overdrive	Axle Ratio	None
Automatic	Axle Ratio	Std. 2.93 (2)
Make Automatic	(see page 30)	TorqueFlite
CAPACITY		
Oil (Refill)	(qt)	5
Water (includes heater).....	(qt)	25
Conventional Transmission	(pt)	
Auto. Transmission (Refill).....	(qt)	10.5
Rear Axle	(pt)	3.5
Gasoline	(gal)	23
GENERAL DATA (Four-Door Sedan)		
Wheelbase	(in)	129.0
Over-All Lgth Incl Bumpers.....	(in)	225.8
Shipping Weight	(lb)	4590 (3)
Tire Size—Recm Press.....	(lb)	9.50 x 14-22-22
(1) Dual breaker distributor, 27° to 32° each breaker.		
(2) 3.15 axle ratio with air conditioning.		
(3) Crown Imperial 4755, Imperial LeBaron 4780.		

CAR MODEL

Capri and Premiere

ENGINE

No. Cyl-Head Type.....	V-8-I
Bore and Stroke (in).....	4 30 x 3.70
Displacement (cu in).....	430
AMA Horsepower.....	59.17
Max Horsepower @ rpm.....	375 @ 4800
Max Torque, lb-ft @ rpm.....	490 @ 3100
Max bmep, lb/sq in.....	171.8
Compression Ratio.....	10.5

IGNITION

Spark Plug—Factory Eqpt.....	Champ F 11-Y
Alternate.....	AC 84TS, AL BF 42
Spark Plug Gap.....	.032" to .036"
Firing Order.....	1-5-4-2-6-3-7-8
Distributor—Make and Model...	Ford FEW 12127-E
Breaker Gap.....	.015"
Cam Angle.....	26° to 28.5°
Timing—Crankshaft Degrees....	7° BTC
Adv Deg—Centrif—Vac.....	26-1/2—23
Adv Begin. Ends Eng rpm....	700 4000
Battery—Volts, Terminal Ground	12, Negative

VALVES

Size and Material.....	Int 2 145", S11 1, Aluminum Coated
	Exh 1.775", Ford Cast Austenitic, Aluminum Coated
Tappet Ctr—Seat Angle.....	Int Hydraulic Lifters, 30°
	Exh Hydraulic Lifters, 45°

CARBURETOR

Make, Model.....	Holley 4150
Type and Size.....	4 Bbl, 1.56"

TRANSMISSION
AXLE RATIO

Conventional.....	Axle Ratio None
Overdrive.....	Axle Ratio None
Automatic.....	Axle Ratio Std. 2.89 (1)
Make Automatic.....	(see page 30) Turbo-Drive

CAPACITY

Oil (Refill).....	(qt) 8
Water (includes heater).....	(qt) 26
Conventional Transmission.....	(pt) 10-1.2
Auto. Transmission (Refill).....	(qt) 4
Rear Axle.....	(gal) 22
Gasoline.....	

GENERAL DATA (Four-Door Sedan)

Wheelbase.....	(in) 131.0
Over-All Lgth Incl Bumpers.....	(in) 229.0
Shipping Weight.....	(lb) 4802 (2)
Tire Size—Recm Press.....	(lb) 9.00 x 14-24-24 (3)

(1) 3.07 axle ratio optional on all models and standard on air conditioned cars.

(2) Weight given for Lincoln Premiere.

(3) 9.50 x 14 tires optional; standard on air conditioned cars.

MERCURY

CAR MODEL	Monterey	Montclair	Park Lane
ENGINE			
No. Cyl-Head Type.....	V-8-I	V-8-I	V-8-I
Bore and Stroke (in).....	4.3 x 3.3	4.3 x 3.3	4.3 x 3.7
Displacement (cu in).....	383 (1)	383 (1)	430
AMA Horsepower.....	59.17	59.17	59.17
Max Horsepower @ rpm.....	312 @ 4600 (1)	330 @ 4800 (1)	360 @ 4600 (1)
Max Torque, lb-ft @ rpm.....	405 @ 2900 (1)	425 @ 3000 (1)	480 @ 3000 (1)
Max bmep, lb/sq in.....	159.5	167.3	168.3
Compression Ratio.....	10.5	10.5	10.5
IGNITION			
Spark Plug—Factory Eqpt.....	Champ F 11-Y	Champ F 11-Y	Champ F 11-Y
Alternate.....	AC 84TS, AL BF 42		
Spark Plug Gap.....	.032" to .036"	.032" to .036"	.032" to .036"
Firing Order.....	1-5-4-2-6-3-7-8		
Distributor—Make and Model...	Ford FEW 12127-E		
Breaker Gap.....	.014" to .016"	.014" to .016"	.014" to .016"
Cam Angle.....	26° to 28.5°	26° to 28.5°	26° to 28.5°
Timing—Crankshaft Degrees....	(2)	7° BTC	7° BTC
Adv Deg—Centrif—Vac.....	26-1/2-23	26-1/2-23	26-1/2-23
Adv Begins—Ends—Eng rpm....	700-4000	700-4000	700-4000
Battery—Volts, Terminal Ground	12, Negative	12, Negative	12, Negative
VALVES			
Size and Material.....Int	2.085", Sil 1 (3)	2.085", Sil 1 (3)	2.145", Sil 1 (3)
Exh	1.775", Ford Cast Austenitic (3)		
Tappet Clr—Seat Angle.....Int	Hydraulic Lifters, 30°		
Exh	Hydraulic Lifters, 45°		
CARBURETOR			
Make, Model.....	Ford or Holley	Holley	
Type and Size.....	4 Bbl, 1.437"	4 Bbl, 1.50"	4 Bbl, 1.56"
TRANSMISSION AXLE RATIO			
Conventional.....	Std. 3.56	None	None
Overdrive.....	Opt. 3.58	None	None
Automatic.....	Opt. 2.69 (4)	Std. 2.69 (4)	Std. 2.91
Make Automatic (see page 30)	Merc-O-Matic	Merc-O-Matic	Multi-Drive
CAPACITY			
Oil (Refill).....(qt)	5	5	5
Water (includes heater).....(qt)	21.5	21.5	21.5
Conventional Transmission.....(pt)	3.25 (5)		
Auto. Transmission (Refill).....(qt)	11	11	11.5
Rear Axle.....(pt)	5	5	5
Gasoline.....(gal)	20	20	20
GENERAL DATA (Four-Door Sedan)			
Wheelbase.....(in)	122	123	125
Over-All Lgth Incl Bumpers.....(in)	213.2	213.2	220.2
Shipping Weight.....(lb)	4114	4166	4255
Tire Size—Recm Press.....(lb)	8.00x14-24-24 (6)	8.50x14-24-24	

- (1) 430 cu. in., 360 bhp 7 4600 engine optional on the Turnpike Cruiser. A 430 cu. in., 400 bhp 7 4600, 480 lb-ft 7 300 engine equipped with three 2-barrel carburetors optional on all models.
- (2) 4 BTC with standard transmission; 7 BTC with Merc-O-Matic transmission.
- (3) Intake and exhaust valves aluminum coated.
- (4) 2.91 axle used on air conditioned cars and all cars equipped with the optional 430 cu. in. engine.
- (5) 4-1/2 pints with overdrive.
- (6) 8.50 x 14 tires used on air conditioned cars.

OLDSMOBILE

CAR MODEL	"88"	Super "88"	Ninety-Eight
ENGINE			
No. Cyl-Head Type.....	V-8-I	V-8-I	V-8-I
Bore and Stroke (in).....	4.0 x 3.69	4.0 x 3.69	4.0 x 3.69
Displacement (cu in).....	371	371	371
AMA Horsepower.....	51	51	51
Max Horsepower @ rpm.....	265 @ 4400 (1)	305 @ 4600 (1)	305 @ 4600 (1)
Max Torque, lb-ft @ rpm.....	390 @ 2400 (1)	410 @ 2800 (1)	410 @ 2800 (1)
Max bmep, lb/sq in.....	158.5	166.7	166.7
Compression Ratio.....	10.0	10.0	10.0
IGNITION			
Spark Plug—Factory Eqpt.....	AC 44	AC 44	AC 44
Alternate.....		Champ J-12Y, AL A42	
Spark Plug Gap.....	.030"	.030"	.030"
Firing Order.....		1-8-7-3-6-5-4-2	
Distributor—Make and Model...		Delco-Remy 1110929	
Breaker Gap.....	.016"	.016"	.016"
Cam Angle.....	28° to 32°	28° to 32°	28° to 32°
Timing—Crankshaft Degrees....	5° BTDC @ 850 rpm with vacuum disconnected		
Adv Deg—Centrif—Vac.....	24-24	24-24	24-24
Adv Begins Ends Eng rpm....	600-4400	600-4400	600-4400
Battery—Volts, Terminal Ground	12, Negative	12, Negative	12, Negative
VALVES			
Size and Material.....	Int Exh	1.75", SAE 3140 or SAE 8645 1.56", 21-4N	
Tappet Clr—Seat Angle.....	Int Exh	Hydraulic Lifters, 45° Hydraulic Lifters, 45°	
CARBURETOR			
Make, Model.....	RP 2GC	RP 4GC	RP 4GC
Type and Size.....	2 Bbl, 1.4375"	4 Bbl, Pri. 1.56", Sec. 1.69"	
TRANSMISSION AXLE RATIO			
Conventional.....	Std. 3.64	Std. 3.64	None
Overdrive.....	None	None	None
Automatic.....	Opt. 3.07	Opt. 3.23	Std. 3.42
Make Automatic (see page 30)	Hydra-Matic	Hydra-Matic	Hydra-Matic
CAPACITY			
Oil (Refill).....(qt)	4	4	4
Water (includes heater).....(qt)	21	21	21
Conventional Transmission.....(pt)	2.5	2.5	2.5
Auto. Transmission (Refill).....(qt)	11	11	11
Rear Axle.....(pt)	5	5	5
Gasoline.....(gal)	20	20	20
GENERAL DATA (Four-Door Sedan)			
Wheelbase.....(in)	122.5	122.5	126.5
Over-All Lgth Incl Bumpers.....(in)	208.2	208.2	216.7
Shipping Weight.....(lb)	3985	4008	4316
Tire Size—Reem Press.....(lb)	8.50x14-22-20	Standard; 9.00x14-22-20	Optional

(1) Power package engine with three 2-barrel Rochester carburetors optional.
312 bhp @ 4600 rpm, 415 lb-ft at 2800 rpm.

PACKARD

CAR MODEL

Packard Hawk

ENGINE

No. Cyl-Head Type.....	V-8-I
Bore and Stroke (in).....	3-9/16 x 3-5/8
Displacement (cu in).....	289
AMA Horsepower.....	40.0
Max Horsepower @ rpm.....	275 @ 4800 (1)
Max Torque, lb-ft @ rpm.....	333 @ 3200
Max bmep, lb/sq in.....	173.8
Compression Ratio.....	7.8 supercharged (1)

IGNITION

Spark Plug—Factory Eqpt.....	Champ H-18Y
Alternate.....	AL AL 82
Spark Plug Gap.....	.033" to .038"
Firing Order.....	1-8-4-3-6-5-7-2
Distributor—Make and Model...	Daleo-Remy 1110864
Breaker Gap.....	.013" to .018"
Cam Angle.....	23° to 24°
Timing—Crankshaft Degrees....	4°BTC
Adv Deg—Centrif—Vac.....	24-16
Adv Begins—Ends—Eng rpm....	600-2250
Battery—Volts, Terminal Ground	12, Negative

VALVES

Size and Material.....Int	1-21/32", SAE 8645
Exh	1-17/32", SAE 2112N
Tappet Clr—Seat Angle.....Int	.023" to .025" H, 45°
Exh	.023" to .025" H, 45°

CARBURETOR

Make, Model.....	Strom WY
Type and Size.....	2 Bbl, 1.25"

TRANSMISSION

AXLE RATIO

Conventional	Axle Ratio	None
Overdrive	Axle Ratio	Opt. 4.09
Automatic	Axle Ratio	Std. 3.31
Make Automatic	(see page 30)	Flightomatic

CAPACITY

Oil (Refill).....(qt)	5
Water (Includes heater).....(qt)	18.5
Overdrive Transmission.....(pt)	4.6
Auto. Transmission (Refill).....(qt)	9.5
Rear Axle.....(pt)	3
Gasoline.....(gal)	18

GENERAL DATA (Four-Door Sedan)

Wheelbase.....(in)	120.5
Over-All Lgth Incl Bumpers.....(in)	205-1/16
Shipping Weight.....(lb)	3470
Tire Size—Recm Press.....(lb)	8.00 x 14-24-20

(1) A single stage supercharger with a variable speed drive is used.

PLYMOUTH

CAR MODEL	Plaza, Savoy and Belvedere 6	Plaza, Savoy and Belvedere V-8	Golden Commando Engine Option
ENGINE			
No. Cyl-Head Type.....	6-L	V-8-I	V-8-I
Bore and Stroke (in).....	3.25 x 4.63	3.91 x 3.31	4.06 x 3.38
Displacement (cu in).....	230	318	350
AMA Horsepower.....	25.4	48.9	52.7
Max Horsepower @ rpm.....	132 @ 3600	225 @ 4400 (1)	305 @ 5000 (2)
Max Torque, lb-ft @ rpm.....	205 @ 1200	330 @ 2800 (1)	370 @ 3600 (2)
Max bmep, lb/sq in.....	134.4	156.5	159.2
Compression Ratio.....	8.0	9.0	10.0
IGNITION			
Spark Plug—Factory Eqpt.....	AL AR-51	AL AR-42	AL AR-32
Alternate.....	J-8, R 45	Champ XJ	12Y, AC R44S
Spark Plug Gap.....	.035"	.035"	.035"
Firing Order.....	1-5-3-6-2-4	1-8-4-3-6-5-7-2	
Distributor—Make and Model...	AL IBR-4001	AL IBP-4003F (1)	AL IBS-4006B
Breaker Gap.....	.012" to .022"	.015" to .018"	.015" to .018"
Cam Angle.....	39° + 3°	27° to 32°	36° to 40° Total
Timing—Crankshaft Degrees....	2° BTC	10° BTC	8° BTC
Adv Deg—Centrif—Vac.....	17-19	18-26-3/4	20-19
Adv Begins—Ends—Eng rpm....	700-3600	875-4600	700-4000
Battery—Volts, Terminal Ground	12, Negative	12, Negative	12, Negative
VALVES			
Size and Material.....	Int 1.53", Sil F	1.84", Sil F	1.95", Sil F
	Exh 1.41", XCR	1.56", 21-4N	1.60", 21-4N
Tappet Ctr—Seat Angle.....	Int .010" H, 45°	.012" H, 45°	Hyd. Lifters, 45°
	Exh .010" H, 45°	.018" H, 45°	Hyd. Lifters, 45°
CARBURETOR			
Make, Model.....	Carter BBS	Car BBS or Strom WW	Carter AFB
Type and Size.....	Sgl, 1.69"	2 Bbl, 1.44"	Two 4 Bbl; Pri 1.44"; Sec 1.56"
TRANSMISSION			
Conventional	Axle Ratio Std. 3.73	Std. 3.54	Std. 3.73
Overdrive	Axle Ratio Opt. 4.1	Opt. 3.91	None
Automatic	Axle Ratio Opt. 3.73	Opt. (3)	Opt. 3.31
Make Automatic (see page 30)	PowerFlite	(3)	TorqueFlite
CAPACITY			
Oil (Refill).....(qt)	5	5	4
Water (Includes heater).....(qt)	14	21	17
Conventional Transmission (pt)	2-3/4 (4)	2-3/4 (4)	2-3/4
Auto. Transmission (Refill).....(qt)	10	(5)	10-1/2
Rear Axle.....(pt)	3-1/4	3-1/2	3-1/2
Gasoline.....(gal)	20	20	20
GENERAL DATA (Four-Door Sedan)			
Wheelbase.....(in)	118	118	118
Over-All Lgth Incl Bumpers.....(in)	206	206	206
Shipping Weight.....(lb)	3220	3400	N.A.
Tire Size—Recm Press.....(lb)	7.50x14-22-22	7.50x14-24-22	8.00x14-22-22

- (1) With power package consisting of 4-barrel Carter AFB carburetor and Auto-Lite IBP-4003D distributor, 250 bhp @ 4400, 340 lb-ft @ 2800. Fury model uses 318 cu. in. engine, 9.25 comp. ratio, two 4-bbl carburetors, 290 bhp @ 5200, 330 lb-ft @ 3600.
- (2) Power figures given for two 4-barrel carburetors. With fuel injection 315 bhp @ 5000, 370 lb-ft @ 3600.
- (3) PowerFlite or TorqueFlite optional. 3.31 axle with PowerFlite; 3.15 with TorqueFlite.
- (4) 3 4 pint additional with overdrive.
- (5) PowerFlite 10 quarts; TorqueFlite 9 quarts refill.

PONTIAC

CAR MODEL	Chieftain	Super Chief	Star Chief
ENGINE			
No. Cyl-Head Type.....	V-8-I	V-8-I	V-8-I
Bore and Stroke (in).....	4.06 x 3.56	4.06 x 3.56	4.06 x 3.56
Displacement (cu in).....	370	370	370
AMA Horsepower.....	52.8	52.8	52.8
Max Horsepower @ rpm.....	240 @ 4500 (1) (3)	255 @ 4500 (2) (3)	255 @ 4500 (2) (3)
Max Torque, lb-ft @ rpm.....	354 @ 2600 (1) (3)	360 @ 2600 (2) (3)	360 @ 2600 (2) (3)
Max bhp, lb sq in.....	144.3	144.3	146.7
Compression Ratio.....	8.6 (1) (3)	8.6 (1) (3)	8.6 (2) (3)
IGNITION			
Spark Plug—Factory Eqpt.....	AC 45	AC 45	AC 45
Alternate.....		Champ J-18Y, AL A52	
Spark Plug Gap.....	.033" to .038"	.033" to .038"	.033" to .038"
Firing Order.....		1-8-4-3-6-5-7-2	
Distributor—Make and Model...		DR 1110924 with 8 6 CR;	
		DR 1110913 with 10 & 10-5 CR	
Breaker Gap.....	.016"	.016"	.016"
Cam Angle.....	28° to 32°	28° to 32°	28° to 32°
Timing—Crankshaft Degrees....	6° BTC	6° BTC	6° BTC
Adv Deg—Centrif—Vac.....	28-20 with 8.6 CR;	22-20 with 10 & 10.5 CR	
Adv Begins—Ends—Eng rpm....	650-4600	650-4600	650-4600
Battery—Volts, Terminal Ground	12, Negative	12, Negative	12, Negative
VALVES			
Size and Material.....Int		1.88", Sil F Aluminum Treated	
Exh		1.60", MXCR Aluminum Treated	
Tappet Clr—Seat Angle.....Int		Hydraulic Lifters, 30°	
Exh		Hydraulic Lifters, 45°	
CARBURETOR			
Make, Model.....	RP 2GC (3)	RP 2GC (3)	Carter AFB (3)
Type and Size.....	2 Bbl, 1.69"	2 Bbl, 1.69"	4 Bbl, 1.44" Pri; 1.69" Sec.
TRANSMISSION AXLE RATIO			
Conventional.....	Std. 3.42	Std. 3.42	Std. 3.42
Overdrive.....	None	None	None
Automatic.....	Opt. 3.23	Opt. 3.23	Opt. 3.23
Make Automatic.....	(see page 30) Hydra-Matic	Hydra-Matic	Hydra-Matic
CAPACITY			
Oil (Refill).....(qt)	5	5	5
Water (Includes heater).....(qt)	22.3	22.3	22.3
Conventional Transmission.....(pt)	1.8	1.8	1.8
Auto. Transmission (Refill).....(qt)	9	9	9
Rear Axle.....(pt)	5	5	5
Gasoline.....(gal)	20	20	20
GENERAL DATA (Four-Door Sedan)			
Wheelbase.....(in)	123	124	124
Over-All Lgth Incl Bumpers.....(in)	210.5	215.5	215.5
Shipping Weight.....(lb)	3735	3770	3825
Tire Size—Reem Press.....(lb)	8.60x14-22-22Standard; 8.50x14-20-20Optional		
(1) A 10 to 1 compression ratio 270 bhp @ 4600 rpm, 388 lb-ft @ 2800 rpm engine used when Hydra-Matic transmission is specified.			
(2) A 10 to 1 compression ratio 255 bhp @ 4600, 395 lb-ft @ 2800 engine used when Hydra-Matic transmission is specified.			
(3) The following optional engines are available on all models:			
BHP @ RPM	Torque @ RPM	CR	Carburetor
285 @ 4600	395 @ 2800	10.0	4 Bbl
300 @ 4600	400 @ 3000	10.5	3 — 2 Bbl
310 @ 4800	400 @ 3400	10.5	Fuel Injection

RAMBLER

CAR MODEL	Rambler 6 5810	Rambler Rebel 5820	Rambler Ambassador 5880
ENGINE			
No. Cyl-Head Type	6-1	V-8-I	V-8-I
Bore and Stroke (in)	3.125 x 4.25	3.5 x 3.25	4.0 x 3.25
Displacement (cu in)	195.6	250	327
AMA Horsepower	23.44	39.2	51.2
Max Horsepower @ rpm	127 @ 4200 (1)	215 @ 4900	270 @ 4700
Max Torque, lb-ft @ rpm	180 @ 1600 (1)	260 @ 2500	360 @ 2600
Max bmep, lb/sq in	138.5	156.8	166.0
Compression Ratio	8.7	8.7	9.7
IGNITION			
Spark Plug—Factory Eqpt	Auto-Lite AL-7 or Champ H-10		
Alternate	AC 45L	AC 45L	AC 45L
Spark Plug Gap .....	.033" to .037"	.033" to .037"	.033" to .037"
Firing Order	1-5-3-6-2-4	1-8-4-3-6-5-7-2	1-8-4-3-6-5-7-2
Distributor—Make and Model	DR 1110246	DR 1110923	DR 1110887
Breaker Gap .....	.016"	.016"	.016"
Cam Angle	28° to 35°	28° to 32°	28° to 32°
Timing—Crankshaft Degrees	5° BTC	5° BTC	5° BTC
Adv Deg—Centrif—Vac	22-22	36-24	36-20
Adv Begins—Ends—Eng rpm	1000-4200	650-4000	600-3800
Battery—Volts, Terminal Ground	12, Negative	12, Negative	12, Negative
VALVES			
Size and Material	Int 1.594", Sil 1 or XB Exh 1.343", 2112N	1.787", Sil 1 or XB 1.406", 2112N	
Tappet Clr—Seat Angle	Int .012" H, 45° Exh .016" H, 45°	.012" H, 30° .014" H, 45°	Hyd. Lifters, 30° Hyd. Lifters, 45°
CARBURETOR			
Make, Model	Carter AS (1)	Holley 4150C	
Type and Size	Sgl, 1.4375"	4 Barrel, 1.4375"	
TRANSMISSION AXLE RATIO			
Conventional	Std. 3.78 (2)	Std. 4.10 (2)	Std. 4.10
Overdrive	Opt. 4.38 (3)	Opt. 4.44 (3)	Opt. 4.10
Automatic	Opt. 3.31 (4)	Opt. 3.55 (4)	Opt. 3.15
Make Automatic (see page 30)	Flash-O-Matic	Flash-O-Matic	Flash-O-Matic
CAPACITY			
Oil (Refill)	(qt) 4	4	4
Water (Includes heater)	(qt) 11	21	20
Conventional Transmission	(pt) 1.5 (5)	2.25 (5)	4 (5)
Auto. Transmission (Refill)	(qt) 10	10	11
Rear Axle	(pt) 3	4	4
Gasoline	(gal) 20	20	20
GENERAL DATA (Four-Door Sedan)			
Wheelbase	(in) 108	108	117
Over-All Lgth Incl Bumpers	(in) 191.15	191.15	200.15
Shipping Weight	(lb) 2960	3300	3456
Tire Size—Recm Press	(lb) 6.40x15-24-24(6)	7.50x14-24-24	8.00x14-22-20

- (1) 138 bhp @ 4500, 185 lb-ft @ 1800 with optional Carter WCD 2-barrel carburetor.
- (2) 4.38 or 4.11 optional on Rambler 6; 4.44 optional on Rebel.
- (3) 4.11 optional on Rambler 6; 4.10 optional on Rebel.
- (4) 3.78 optional on Rambler 6; 3.15 optional on Rebel.
- (5) Overdrive requires 1.25 pints additional on Rambler 6 or Rambler Rebel. 4 pints total capacity of O.D. and transmission on Ambassador.
- (6) 6.70 x 15-24-24 tires optional on Rambler 6.

RAMBLER-METROPOLITAN

CAR MODEL	Rambler 100 ^a Wheelbase	Metropolitan 1500
ENGINE		
No. Cyl-Head Type.....	6-L	4-I
Bore and Stroke (in).....	3-1 8 x 4-1/4	2-7/8 x 3-1/2
Displacement (cu in).....	195.6	90.89
AMA Horsepower.....	23.44	13.22
Max Horsepower @ rpm.....	90 @ 3600	55 @ 1600
Max Torque, lb-ft @ rpm.....	150 @ 1600	82 @ 2100
Max bmepp, lb sq in.....	115.7	135.9
Compression Ratio.....	8.0	8.3
IGNITION		
Spark Plug—Factory Eqpt.....	Auto-Lite AL 7	Champion N-8B
Alternate.....	Champ H-10, AC 45L	AL AG-5, AC 45XL
Spark Plug Gap.....	.030"	.024" to .026"
Firing Order.....	1-5-3-6-2-4	1-3-4-2
Distributor—Make and Model.....	Delco-Remy	Lucas LA-12
Breaker Gap.....	.016"	.014" to .016"
Cam Angle.....	28° to 35°	60° + 3°
Timing—Crankshaft Degree.....	5° BTC	5° BTC
Adv Deg—Centrif—Vac.....	12-11	24-20
Adv Begins—Ends—Eng rpm.....	850-4000	480-3450
Battery—Volts, Terminal Ground.....	12 Negative	12, Positive
VALVES		
Size and Material.....	Int 1-10 32", 3140	1-3/8", Sil 1
	Exh 1-11/32", 2112	1-3/16", XB
Tappet Clr—Seat Angle.....	Int .015" H, 45°	.015" H or C, 45°
	Exh .015" H, 45°	.015" H or C, 45°
CARBURETOR		
Make, Model.....	Carter YF	Zenith 30-VIG-10
Type and Size.....	Single	Single
TRANSMISSION AXLE RATIO		
Conventional.....	Std. 3.77	Std. 4.22
Overdrive.....	Opt. 4.4	None
Automatic.....	Opt. 3.3	None
Make Automatic (see page 30).....	Flash-O-Matic	None
CAPACITY		
Oil (Refill).....(qt)	4	4
Water (includes heater).....(qt)	11	8
Conventional Transmission.....(pt)	1-1/2 (1)	5-1/2
Auto. Transmission (Refill).....(qt)	10	
Rear Axle.....(pt)	3	2-1/4
Gasoline.....(gal)	20	10-1/2
GENERAL DATA (Four-Door Sedan)		
Wheelbase.....(in)	100	85
Over-All Lgth Incl Bumpers.....(in)	178-1/4	140-1/2
Shipping Weight.....(lb)	2495 (Est.)	1875 (Hard top)
Tire Size—Recm Press.....(lb)	5.90x15-24-24 (2)	5.20x13-24-22 (3)

(1) Overdrive requires 1-1/4 pints additional.

(2) 6.40 x 15 tires optional.

(3) 5.90 x 13 tires optional.

STUDEBAKER

CAR MODEL	Scotsman & Champion	Commander	President
ENGINE			
No. Cyl-Head Type.....	6-L	V-8-I	V-8-I
Bore and Stroke (in).....	3 x 4-3/8	3-9/16 x 3-1/4	3-9/16 x 3-5/8
Displacement (cu in).....	185.6	259.2	289
AMA Horsepower.....	21.6	40.6	40.6
Max Horsepower @ rpm.....	101 @ 4000	180 @ 4500	225 @ 4500
Max Torque, lb-ft @ rpm.....	152 @ 1800	260 @ 2800	305 @ 3000
Max bmep, lb/sq in.....	123.5	151.3	159.1
Compression Ratio.....	7.8	8.3	8.3
IGNITION			
Spark Plug—Factory Eqpt.....	Champ J-7	Champ H18Y	Champ H18Y
Alternate.....	AC 44, AL A5	AL AL 82	AL AL 82
Spark Plug Gap.....	.028" to .033"	.033" to .038"	.033" to .038"
Firing Order.....	1-5-3-6-2-4	1-8-4-2-6-5-7-2	1-8-4-2-6-5-7-2
Distributor—Make and Model.....	AL IAT-4201	DR 1110861	DR 1110861
Breaker Gap.....	.020"	.013" to .018"	.013" to .018"
Cam Angle.....	38° to 40°	28° to 34°	28° to 34°
Timing—Crankshaft Degrees.....	2°BTC	4°BTC	4°BTC
Adv Deg—Centrif—Vac.....	14-18	24-16	24-16
Adv Begins—Ends—Eng rpm.....	800-2800	600-2250	600-2250
Battery—Volts, Terminal Ground	12, Negative	12, Negative	12, Negative
VALVES			
Size and Material.....	Int 1-11/32", CNS Exh 1-9/32", 2112	1-21/32", SAE 8645 1-17/32", 2112N	
Tappet Clr—Seat Angle.....	Int .016" C, 45° Exh .016" C, 45°	.026" C or .024" H, 45° .026" C or .024" H, 45°	
CARBURETOR			
Make, Model.....	Carter	Strom WW	Car WCFB
Type and Size.....	Single 1.25"	2 Bbl., 1.25"	4 Bbl., 1.25"
TRANSMISSION AXLE RATIO			
Conventional.....	Std. 4.10 (1)	Std. 3.54	Std. 3.54
Overdrive.....	Opt. 4.56 (1)	Opt. 3.73	Opt. 3.92
Automatic.....	Opt. 3.54 (1)	Opt. 3.31	Opt. 3.31
Make Automatic (see page 30)	Flightomatic	Flightomatic	Flightomatic
CAPACITY			
Oil (Refill).....(qt)	8	5	5
Water (Includes heater).....(qt)	12.5 (2)	18.5	18.5
Conventional Transmission.....(pt)	2.3 (3)	3.8 (3)	3.8 (3)
Auto. Transmission (Refill).....(qt)	9	9	9
Rear Axle.....(pt)	2.5	3	3
Gasoline.....(gal)	18	18	18
GENERAL DATA (Four-Door Sedan)			
Wheelbase.....(in)	116-1, 2 (4)	116-1/2	120-1/2 (4)
Over-All Lgth Incl Bumpers.....(in)	202-3/8 (4)	202-3/8	206-3/8 (4)
Shipping Weight.....(lb)	2835 (45)	3185	3365
Tire Size—Room Press.....(lb)	6.49x15-24-20	7.50x14-24-20	8 (69)x14-24-20

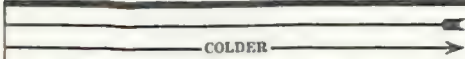
- (1) Data given for Champion. Scotsman uses 3.54 axle ratio with conventional transmission and with overdrive. Automatic transmission is not available on the Scotsman.
- (2) Champion 12.5 quarts. Scotsman 11.5.
- (3) Overdrive requires .85 pints additional on 6's and .24 pints on V-8's.
- (4) Silver Hawk and Golden Hawk models 120-1, 2" wheelbase, 203-15/16" over-all.
- (5) Weight given for Champion, Scotsman 2710 pounds.

SPARK PLUG HEAT

		← HOTTER →			
AC	10 mm 1/4" Reach	M-8			
	14 mm 3/8" Reach	C49	48 48X	46-5 46 R16 46X	R45 45S* 45 R45S*
	14 mm 1/2" Reach	47L			45L
	14 mm 3/4" Reach	47XL		46XL	45XL 45XLR R45XLS*
	18 mm 60° Seat			86T 86TS*	85T R85T 85TS*
CHAM- PION	10 mm 1/4" Reach	Y-8		Y-6	
	14 mm 3/8" Reach	J-14	J-12	J-11	J-8 J-18Y*
	14 mm 1/2" Reach	H-12		H-11	H-10 H-18Y*
	14 mm 3/4" Reach	N-18			
	18 mm 60° Seat	870 F-14Y*			
AUTO- LITE	10 mm 1/4" Reach	P6 PR6			
	14 mm 3/8" Reach	A11	AR10 AT10	A9 AR9 AR20 4S-140	AR2* AR2* AT8
	14 mm 1/2" Reach	AL11	AL9		ARL9 ATL8
	14 mm 3/4" Reach	4GS125		4GS-150 AGR82*	AL7
	18 mm 60° Seat			BRF8 BRF82* BRF82*	BF7

* Plugs with extended gap design

RANGE COMPARISONS

							
104				10 mm 1/4" Reach	AC		
44 R44 44-5	R44S* 44S*	43 43-5 43-5R R43	42	14 mm 3/8" Reach			
43L				14 mm 1/4" Reach			
R44XLS*		R44XL		14 mm 3/4" Reach			
84T 84TS*				18 mm 60" Seat			
Y-4A				10 mm 1/4" Reach	CHAM- PION		
J-7	J-12Y* XJ-12Y*	J-6	J-5	J-2		14 mm 3/8" Reach	
H-9	H-8					14 mm 1/4" Reach	
N-8 N-8B	N-16Y*	N-5 NA-8	XN12Y*	N-3 NA-10		14 mm 3/4" Reach	
860 F-11Y*			F-10			18 mm 60" Seat	
P4 PR4				10 mm 1/4" Reach	AUTO- LITE		
AT6	AR5 AR51 A5	A52* AR52*	AR4 AR41 AT4	A42* AR42*		A3 AR32* AT3 4S-250	14 mm 3/8" Reach
AL5 ARL5		ATL4		14 mm 1/4" Reach			
AGR51 4GS-175 AG5		AGR52* AG52*		4GS-200 AGR41 AGR42*		AGR32* AGR31 AG3	14 mm 3/4" Reach
BTF6		BRF42* BF42*		BTF3		18 mm 60" Seat	

AUTOMATIC TRANSMISSIONS

Variable Pitch Dynaflow (Buick)

The Dynaflow transmission consists of a five-element torque converter and a multiple pinion planetary gearset providing low and reverse ratios. The two turbine elements of the converter are interconnected through a planetary gearset of 1.6:1 ratio. The stator vanes are pivoted in the vane carrier and their pitch is controlled by a hydraulic piston in response to accelerator position. The maximum torque multiplication of the converter is 3.5 in the high stator pitch and 3.2 in the low pitch position. No additional gearing, other than the internal gearing between the turbines, is used for normal forward driving. The drive is always through the converter. Low range 1.82:1 gear ratio can be manually engaged at any throttle position for extra pulling power and engine braking.

Flight Pitch Dynaflow (Buick)

This transmission consists of a five-element torque converter consisting of three turbines, a variable pitch stator and a pump. Two of the turbines are connected individually to the output shaft through the elements of two planetary gearsets, while the third turbine is directly connected to the output shaft. A multiple-pitch stator provides an infinite number of positions from low to high angle in response to throttle position. The maximum torque multiplication of the converter is 4.5:1. No additional gearing other than the internal gearing between the turbines and the output shaft is provided. A hydraulic retarder is used for downhill braking.

Flash-O-Matic (American Motors)

This transmission is used on Rambler automobiles and is composed of a three-element torque converter and a multiple pinion compound planetary gearset to produce three forward speeds and reverse. The drive is always through the converter which has a maximum torque multiplication of 2.12:1. Normal drive starts through the torque converter and low gear ratio (2.40:1), shifts to torque converter plus intermediate ratio (1.47:1) and then shifts to converter only. In D-2 position transmission starts in intermediate gear and shifts to direct. The shifts are automatic and vary with car speed and accelerator position. The transmission can be manually locked in low range for added pulling power and engine braking.

Flightomatic (Studebaker-Packard Corporation)

This transmission is used on Studebaker and Packard automobiles and is composed of a three-element torque converter and a multiple pinion compound planetary gearset to produce three forward speeds and reverse. The drive is always through the converter which has a maximum torque multiplication of 2.15:1. Normal drive starts through the torque converter and low gear ratio (2.40:1), shifts to torque converter plus intermediate ratio (1.47:1) and then shifts to converter only. The shifts are automatic and vary with car speed and accelerator position. The transmission can be manually locked in low range for added pulling power and engine braking.

Fordomatic, Merc-O-Matic, Teletouch and Turbo-Drive (Ford, Mercury, Edsel, and early production Lincoln and Continental)

This transmission is composed of a three-element torque converter and a multiple pinion planetary gear system to produce three forward speeds and reverse. The drive is always through the converter which has a maximum torque multiplication of 1.9 to 2.1:1. Normal drive starts through the torque converter and intermediate gear ratio and automatically shifts to converter only, depending on throttle opening and car speed. Low gear can be engaged for added acceleration from a standstill or from low vehicle speeds by depressing the accelerator to the floor. The transmission may be manually locked in low range for added pulling power or engine braking.

Cruise-O-Matic, Multi-Drive, Turbo-Drive (Ford, Mercury, Edsel, Lincoln and Continental)

This transmission is a redesigned version of the above transmission and is composed of a three element torque-converter and a multiple pinion planetary gear system to produce three forward speeds and reverse. The drive is always through the converter. Normal drive in D-1 position starts through the torque converter and low gear ratio, shifts to torque converter plus intermediate ratio and then shifts to converter only. In D-2 position the transmission starts in intermediate gear and then shifts to direct. The shifts are automatic and vary with car speed and accelerator position.

Hydra-Matic (Detroit Transmission Division, GMC)

This transmission is used by Cadillac, Oldsmobile, and Pontiac. It consists of two fluid couplings and three planetary gearsets providing four forward speeds and reverse. The large fluid coupling is used for the transmission of power as in the original Hydra-Matic. The small fluid coupling acts as a clutch in the forward planetary gearset. The shifts are automatic and vary with car speed and accelerator position. Ratios are as follows: first, 3.97:1; second, 2.55:1; third, 1.55:1; and fourth, 1:1.

PowerFlite (Chrysler Corporation)

This transmission is used on DeSoto, Dodge and Plymouth in both V-8 and six-cylinder cars. It consists of a three-element torque converter and two planetary gearsets providing low and reverse ratios. The drive is always through the converter which has a maximum torque multiplication of 2.7:1. Normal drive starts through the torque converter and low gear ratio (1.72:1) and automatically shifts to converter only, depending on throttle opening and car speed. The transmission can be manually locked in low range for extra pulling power and engine braking.

Powerglide (Chevrolet)

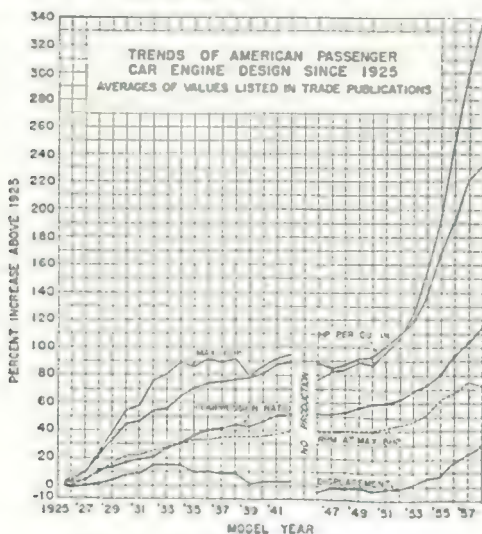
This transmission consists of a three-element torque converter with a multiple pinion planetary gearset providing low and reverse ratios. The drive is always through the converter which has a maximum torque multiplication of 2.1:1. Normal drive starts through the torque converter and low gear ratio (1.82:1) and automatically shifts to converter only, depending on throttle opening and car speed. The transmission can be manually locked in low range for extra pulling power and engine braking.

TorqueFlite (Chrysler Corporation)

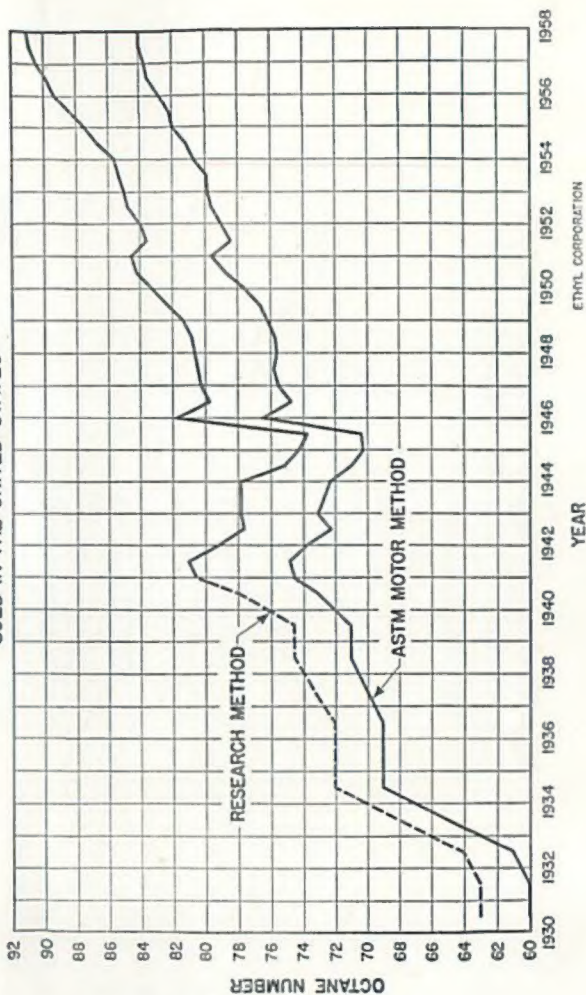
This transmission is used on Chrysler, DeSoto, Dodge, Imperial and Plymouth. It consists of a three-element torque converter and two planetary gearsets providing three forward speeds and reverse. The drive is always through the converter which has a maximum torque multiplication of 2.2 to 2.7, depending on the blade angle of the particular converter used. Normal drive starts through the converter and low gear ratio (2.45:1), shifts to torque converter plus intermediate ratio (1.45:1) and then shifts to converter only. The shifts are automatic and vary with car speed and accelerator position. The transmission may be manually locked in low or intermediate gear for added pulling power or engine braking.

Turboglide (Chevrolet)

This transmission consists of a five-element torque converter consisting of three turbines, a variable pitch stator and a torque converter pump. Two of the turbines are connected individually to the output shaft through the elements of two simple planetary gearsets. The stator vanes are pivoted in the vane carrier and their pitch is controlled by a hydraulic piston in response to accelerator position. The maximum torque multiplication of the converter is 4.2:1 in the high stator pitch position and 3.8 in the low position. No additional gearing other than the internal gearing between the turbines and the output shaft is provided. A hydraulic retarder is used for downhill braking.



TREND IN ANTIKNOCK QUALITY OF REGULAR GASOLINES SOLD IN THE UNITED STATES



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